

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

Mound Operable Unit 1 Recovery Act Project

BACKGROUND

Recovery Act Project:	Mound Operable Unit 1 Recovery Act Project
TAFS:	89-09/10-0253
Project Identification Code:	2002220
Recovery Act Bill Reference:	PL 111-5, Division A, Title IV – Energy and Water Development, Defense Environmental Cleanup
Project Cost:	\$17,900,000
Budget Authority:	06049, FD.06.20.00.0
Program Office:	Environmental Management (EM)
Recovery Program Plan:	EM - Defense
Management Office:	Paul Lucas, 937-247-2221 paul.lucas@emcbc.doe.gov

LEADS

Implementation:	N/A
Breakthrough:	N/A
Laboratory:	N/A

I. SUMMARY & OBJECTIVES

Summary: There is one sub-project being funded with the Recovery Act funds: The Remediation of Mound Operable Unit 1.

Mound Operable Unit 1 - This project remediates wastes being released into the environment during operation of the Mound Plant from 1948 through 1993. As a result of these past activities, the soil and groundwater are contaminated with radioactive and hazardous chemicals. The U.S. Environmental Protection Agency placed the site on the National Priority List in 1989 because of chemical contamination present in the site's groundwater and the site's proximity to a sole-source aquifer.

As part of the Mound Base Cleanup Program approximately 282 acres of the 306 acre site have been remediated and made ready for transfer to the Miamisburg Mound Community Improvement Corporation (MMCIC) with 126 acres remaining to be transferred. A total of 104 acres are awaiting finalization of a Comprehensive Environmental Response, Compensation and Liability Act Record of Decision, and 19 acres are awaiting completion of the current OU-1 contract. The final 4 acres will be remediated to support transfer of the balance of the site to the MMCIC upon completion of this ARRA project.

The purpose of the OU-1 project is to safely remove as much residual contamination as possible within the funding profile leaving the Mound Operable Unit 1 (OU-1) area in a more viable configuration for industrial reuse and effectively reduce the contaminated footprint retained by the federal government by approximately 9 acres. The OU-1 selected response action is an excavation-based response action utilizing a risk based goal

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

of between 10^{-4} to 10^{-6} excess cancer risk for industrial reuse without additional restrictions beyond those in place for the rest of the site. The current site restrictions are listed below:

- Maintenance of industrial or commercial land use;
- Prohibition against the use of groundwater without prior approval from USEPA and Ohio EPA;
- Site access for federal and state agencies for the purpose of sampling and monitoring;
- Prohibition against removal of soil from within the site boundary (as of 1998) to offsite locations without prior approval from USEPA, Ohio EPA and Ohio Dept. of Health;

The primary concern within the OU-1 area consists of residual contamination within a Site Sanitary Landfill that sits on top of an older Historic Waste Disposal Area. The wastes in the Historical Waste Disposal area are expected to include radioactive materials, hazardous and sanitary waste.

ARRA funded scope comprises the remainder of the project, remediation of priorities 6, 7, 8, and rail load out area, final verification, restoration, reporting and closeout. The cleanup priorities associated with the ARRA work scope are defined as follows and will be completed by the end of FY 2010:

Priority 6 - Removal of clean landfill berm and cover material as required to access the remainder of the other historical waste area (Estimated at 12,579 cubic yards to be reused as backfill).

Priority 7 – Remediation of the Other Historical Waste Area (Waste Estimated at 12,248 cubic yards).

Priority 8 – Removal of remaining clean landfill berm material to be reused as backfill, estimated at 12,938 cubic yards.

Investigation of the remaining OU-1 footprint – This activity is associated with assessing areas within the footprint of OU-1 not impacted by the waste excavation activities outlined above and remediate any waste found above guidelines. (377 cubic yards of waste is estimated / assumed to be generated).

Removal of Rail Load Out Area – Removal of any materials within the rail load out area established to support the OU-1 remediation activities and remediate/remove any materials that have become contaminated in support of the above remediation efforts. (4,047 cubic yards of waste is estimated / assumed to be generated).

Completion of the remediation of all OU-1 Project Area and all associated Comprehensive Environmental Response, Compensation and Liability Act documentation to close the site and effect transfer of the property to the local community by the end of CY 2011. Soils and debris generated as part of the OU-1 work scope will be packaged and shipped to the Energy Solutions disposal facility in Clive, Utah.

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

Deinventory and Demolition Projects:

There are no deinventory or demolition activities associated with the OU-1 ARRA Project.

Work Scope Changes:

Priority 6 work scope and the shipment of 37 railcars of Priority 7 Low Level Waste were completed using FY09 OU-1 Earmark Funding.

Buy Back Work Scope:

Not Applicable.

By the end of FY 2010 the following will be completed:

- Complete OU-1 landfill and rail load out cleanup, verification and site restoration.

This Recovery Act work ties to the following DOE and EM Strategic Goals and Themes:

DOE Strategic Goal 4 – Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.

DOE Strategic Goal 5 – Management and Excellence – Enabling the Department’s mission through sound management and business practices.

EM Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.

Public Benefits

The Miamisburg Mound Community Improvement Corporation (MMCIC) has the task of redeveloping the former Mound Plant Site as a scientific business and technology park. MMCIC’s role in implementing the City of Miamisburg’s interests has been to develop and implement the strategy and tactics necessary to achieve business growth and job creation to generate economic stability and wealth. The redevelopment strategy has been to leverage the country’s investment in the sites human, real and personal property assets to the greatest extent possible so that business can generate employment and compete through their technological advances.

The work described above will allow for removal of anticipated restrictions on the OU-1 area above those in place for the balance of the site, thus allowing for maximum redevelopment opportunity and associated community benefit to include job creation and/or job retention.

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

Recovery Act Project Impacts

The OU-1 scope of work at Mound would result in the removal of all waste within the OU-1 area and the associated restrictions anticipated relative to the use of this area above those in place for the balance of the site. Currently the MMCIC as an agent of the City of Miamisburg does not plan on accepting the transfer of the OU-1 area as is; leaving this area to be retained by the federal government in perpetuity. The proposed work scope would ultimately allow for the transfer of the OU-1 area from federal ownership to the MMCIC for redevelopment and productive reuse. The effective footprint reduction as a result of this project is approximately 9 acres.

II. COST & SCHEDULE

Table 1: Budget Implementation Monthly Obligations (actual obligations to contractors for Apr 2009 through Feb 2010 and projected obligations to contractors for Mar 2010 through Sept 2010) (\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with an obligations table.

Table 2. Budget Implementation Actual and Planned Monthly Expenditures (actual costs for Apr 2009 through Feb 2010 and projected costs for Mar 2010 through Sept 2011 and then, if applicable, projected annual expenditure in FY2012) (\$M)

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with a costs table.

Funds Returned and Offsetting Collections

Not applicable

Indirect Costs

All project cost costs are direct charged and the Recovery Act General & Administrative (G&A) rate of 4.11% is the same as the current contract through FY09.

Changes to Baseline Budget

This is a new scope of work and is not in the current site baseline.

Table 4: Changes to Baseline Budgets (\$M)

Not applicable

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

Milestones:

OU-1 Project

Milestone Categories	<u>Baseline Completion Date</u>
Project Start	10/1/2009
Complete Priority 6 Excavation	10/26/2009
Scrape former Pond Area	2/15/2010
Complete Priority 7 Excavation	4/5/2010
Complete Excavation and Backfill of Trenches	4/6/2010
Complete Priority 8 and Final Restoration	9/23/2010
Complete Contractor Demobilization	9/30/2010
Task Order Closeout	11/15/2010
Project CD-4 Closeout	9/30/2011

NEPA Compliance: The scope of work is being undertaken pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act; separate NEPA reviews are not required. The site's NEPA Compliance Officer will monitor implementation and, as necessary, determine whether future NEPA review is required.

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

Table 5: Delivery Schedule for Capital Asset Projects N/A (until OECM and EM agree on the 413.3A graded approach)

Program/OECM Milestone	Delivery (End) Date	Comments
Develop capital asset projects Integrated Project List	Complete	
Develop Parametric Performance Baseline (Individual Projects)	November 2009	Baseline revised to account for scope executed with earmark funding previously assumed to be performed as ARRA funded scope
If < \$100 M Perform IPR, > \$100 M Perform EIR (Individual Projects)	February 2010	EMCBC completed Program Review on aRc Baseline 2/23/2010 Memorandum EMCBC-00301-10
Approve Performance Baseline	September 2009	CD2/3 Approval Memo from Ines Triay dated 9/28/2009
Approve Start of Construction	September 2009	CD2/3 Approval Memo from Ines Triay dated 9/28/2009
Approve Project Completion	October 2010	Dependent on EM/OECM tailored 413.3A approach (CD-4)

NOTES:

This Recovery Act Project is a Capital Asset Project but due to the low cost an EIR nor IPR are required per the agreement between EM and OECM. An independent Program Review was completed by EMCBC and approved per Memorandum EMCBC-00301-10.

III. PERFORMANCE

Performance Measures

Table 6: Project Performance Targets

Recovery Act Project Identification Code	2002220
Linkage To S-1 Priorities	Nuclear Security and Legacy
Linkage to Current Program Goal (if applicable)	DOE Strategic Goal 4 – Environmental Responsibility – Protecting the environment by providing a responsible resolution to the

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

	<p>environmental legacy of nuclear weapons production.</p> <p>EM Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.</p>
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Table 7: National Strategic Benefits N/A

1. Carbon Emission Reductions: Estimated 5-year undiscounted CO ₂ reduction (in metric tons of CO ₂ equivalent) are N/A

Two-Year Outcome-Oriented Performance Measure	Complete the OU-1 (4 acres) cleanup and all required closure/closeout and regulatory documentation.
First Year Performance Target FY 2009 accomplishments)	Complete the planning effort for the cleanup of OU-1.
Q3 - Project-Level Quarterly Performance Milestone(s)	* Complete OU-1 work planning documents
Q4 - Project-Level Quarterly Performance Milestone(s)	* Complete OU-1 field contract modifications; start contractor mobilization t
Second Year Performance Target FY 2010)	Complete OU-1 Cleanup Priorities 5, 6, 7 & 8 cleanup
Q1 - Project-Level Quarterly Performance Milestone(s)	** Complete Priority 6 - Landfill Berm (12,579 cubic yards of clean material)
Q2 - Project-Level Quarterly Performance Milestone(s)	Initiate and continue Priority 7 waste removal
Q3 - Project-Level Quarterly Performance Milestone(s)	Complete Priority 7 - Remaining Historical Waste (12,248 cubic yards of waste material) Complete Priority 8 - Remaining Landfill Berm (12,938 cubic yards of clean material)
Q4 - Project-Level Quarterly Performance Milestone(s)	Complete Contractor demobilization and contract closeout

2. Oil Consumption Reductions: Estimated 5-year reduction in undiscounted oil

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

consumption (in barrels of oil equivalent) is N/A

NOTES: N/A

IV. MANAGEMENT

Secretarial-level Items

Intended Results and Linkage to Secretary's Priorities

Table 8: Secretary's Priorities

Secretary's Priorities	Project Impacts (Qualitative)	Project Impacts (Quantitative)
Science and Discovery	N/A	N/A
Clean, Secure Energy	N/A	N/A
Economic Prosperity	• Create maximum opportunity for site economic development and reuse.	Transfer of entire 306 acre Mound Site for economic redevelopment.
National Security and Legacy	• To the extent possible, remove, transport and dispose of as much waste material from OU-1 to levels compliant with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the state of Ohio.	• Excavate approximately 16,102 cubic yards of contaminated soils and debris to the Energy Solutions disposal facility in Clive, Utah. • Complete Foot print reduction of 9 acres to be transferred to MMCIC
Climate Change	N/A	N/A

Collaboration and Coordination

Collaboration and interaction with local officials and stakeholders, as well as, federal and state regulators (U.S. and Ohio EPA) will remain consistent with current site practices. Regular coordination and status meetings will be held at least monthly. Also, there will be waste shipments to Energy Solutions in Utah or other commercially-operated waste treatment/ storage/disposal facilities. Coordination with these interfaces already exists; however, it will be enhanced throughout this project.

Federal Infrastructure Investments

There are no infrastructure investment project activities associated with the OU-1 Recovery Act Project.

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

Accelerating the removal and proper disposal reduces risk of releases of this material to the environment

The OU-1 scope of work at Mound would result in the removal of all waste within the OU-1 area and the associated restrictions anticipated relative to the use of this area above those in place for the balance of the site. The proposed work scope would ultimately allow for the transfer of the OU-1 area from federal ownership to the MMCIC for redevelopment and productive reuse.

Line Management

DOE and contractor personnel are proceeding with a contractor readiness self-assessment process to evaluate impacts (if any) as a result of Recovery Act project activities. This assessment will include the following areas:

- Integrated Safety Management System (ISMS) adequacy
- Safety and quality assurance requirements flowed to sub-tier contractors
- Newly-hired workers receive full training
- Rigorous contractor oversight program
- Fully developed disposition path for all materials/waste
- Segregation of Recovery Act Project safety performance tracking and reporting
- System in place to recognize changed conditions and adjust oversight/resources

Daily meetings will be conducted by the project field team to ensure safe, efficient, and cost-effective operations. The project metrics, to include performance and safety, will be reviewed in the weekly Integrated Project Team meetings. The project performance will be tracked and reported monthly with the existing contractor's certified Earned Value Management System. A combination of federal and support contractor resources will provide dedicated project and field oversight to all Recovery Act Project activities.

The contractor will use existing practices/procedures to maintain accountability and transparency with respect to Recovery Act activities. These practices include cost tracking through a Defense Contract Audit Agency audited accounting and procurement system and a DOE audited project management reporting system. Recovery Act projects will be tracked and reported independently. The contractor will use the existing work management program and integrated safety management system (ISMS) to plan and execute the Recovery Act projects.

Needs from Staff Offices

1) Human Capital

Support from the Environmental Management Consolidated Business Center will be required for: Project Management, Contracts, Engineering, Finance / Accounting, Property Management

Project Operating Plan - Mound Operable Unit 1 Recovery Act Project

Table 9: Information on Hiring Under the Recovery Act

# & Type of Positions (Title, Series and Grade)	Location (HQ or Field – w/location)	Federal or Contractor	Timeframe (1-6mos; 6+mos; other; specify date needed if possible)
N/A	N/A	N/A	N/A

2) Procurement

Table 10: Procurement Plans

Activity	Type	New/Exist (N/E)	Changes (E), Needs (N)	Status	Expected Complete	Issues (Y/N)
Soil Remediation	Task Order	Exist	Exist	Initiated	9/30/2010	N

NOTES: N/A